

Before the  
Federal Communications Commission  
Washington, D.C. 20554

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OCT 29 1998

In the Matter of )  
 )  
1998 Biennial Regulatory Review -- )  
Modifications to Signal Power )  
Limitations Contained in Part 68 )  
of the Commission's Rules )  
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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

CC Docket No. 98-163

**BELLSOUTH COMMENTS**

BellSouth Corporation, on behalf of BellSouth Telecommunications, Inc. ("BellSouth"), hereby responds to the Commission's request for comments in the above referenced proceeding.<sup>1</sup>

In its *Notice*, the Commission proposes to relax the signal power limitations presently in certain sections of its Part 68 rules. The Commission expects that such relaxation will inure to the benefit of users of 56 kbps modems, allowing them to download data from the Internet more quickly. Although BellSouth is certainly not opposed in principle to modifications to Part 68 that will provide consumer benefits, BellSouth is not convinced in the instant case that current industry analysis provides adequate assurance that the nominal increase in throughput allowed by the proposed revisions would not be offset by increased risks of harm. Moreover, BellSouth believes it is incumbent upon CPE vendors to come forward with such a demonstration, supported by documented test results. Until such a showing is made, adoption of the proposed rule modifications would be premature.

The Commission's specific proposal is to increase the signal power limitation on encoded analog content generated by pulse code modulation (PCM) modems from -12 dBm to -6 dBm.<sup>2</sup>

<sup>1</sup> 1998 Biennial Regulatory Review -- Modifications to Signal Power Limitations Contained in Part 68 of the Commission's Rules, Notice of Proposed Rulemaking, CC Docket No. 98-163, FCC 98-221 (rel. Sept. 16, 1998) ("Notice").

<sup>2</sup> The current -12 dBm limitation is codified in sections 68.308(h)(1)(iv) and 68.308(h)(2)(v) of the Commission's Part 68 Rules.

Based on “recent analysis considering standard crosstalk models and industry-standard performance requirements for network equipment,” the Commission tentatively concludes that “relaxing the -12 dBm signal power limit in Part 68 to a transmit level of -6 dBm for PCM modems is likely to enable higher digital transmission rates to modem users without harmful effects on the network or its users.”<sup>3</sup>

BellSouth agrees that the proposed increase in signal power limitations for PCM modems is unlikely to pose harm to voice services. BellSouth similarly agrees that the *ITU Analysis* upon which the Commission relied in the *Notice* provides a good analysis of the *de minimus* potential for *steady state* crosstalk from these modems.

BellSouth is not as confident, however, that an increase in signal power limits will not cause *transient* harm to other 56 kbps modem connections within the same cable. Rather, absent showings to the contrary, risk to other data users’ throughput should be presumed. Indeed, noise (or crosstalk) transients that would not impair voice services could certainly impair the performance of voiceband data. Thus, before adopting the proposed modifications, the Commission should require demonstration from modem manufacturers that the proposed power limitation increase will not generate *transient* signals that could degrade service to other 56 kbps modems.

Moreover, as a practical matter, the proposed rule revisions are likely to foster only nominal benefit to end users. As the Commission notes, “PCM modems can currently achieve data rates of ... 53 or 54 kbps” when operating within the existing prescribed range of acceptable signal levels.<sup>4</sup> Thus, the proposed increase will allow ISPs to transmit data at only

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<sup>3</sup> *Notice* at ¶ 4 (citing ITU-Telecommunications Standardization Section, Study Group 16 - Question 23, Analysis of -12 dBm Power Limit, PCM ‘97-029, at 4 (1997) (“*ITU Analysis*”)).


<sup>4</sup> *Notice* at ¶ 3.

"moderately"<sup>5</sup> higher speeds and will only "somewhat"<sup>6</sup> improve the transmission rates experienced by end users. Indeed, other factors limiting transmission rates, such as available network capacity, line noise, and the quality of the local loop, have much greater bearing on throughput performance and are unlikely to be affected by the proposal to allow signal power to rise above the current limitations.

In sum, BellSouth agrees that increasing the encoded analog power limit would tend to improve the performance of individual or even a few modem connections within a cable. Absent evidence to the contrary, however, BellSouth does not believe that this nominal performance enhancement is worth the risk of degraded data performance when many user connections traverse a common cable. Accordingly, BellSouth believes that it is premature for the FCC to modify its Part 68 signal power limitation and that modem manufacturer groups should be asked to develop data demonstrating the levels of steady state and transient noise tolerated by these modems before such revisions are adopted.

Respectfully submitted,  
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<sup>5</sup> *Id.* at ¶ 1.

<sup>6</sup> *Id.*

**CERTIFICATE OF SERVICE**

I certify that I have this 29<sup>th</sup> day of October, 1998 served all parties to this action with a copy of the foregoing BELLSOUTH COMMENTS by hand delivery or by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties listed below:

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